

A.D

## PATENT COOPERATION TREATY

PCT/SE99/00821

**PCT**  
**NOTIFICATION OF ELECTION**  
(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

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in its capacity as elected Office

<b>Date of mailing (day/month/year)</b> 27 January 2000 (27.01.00)	
<b>International application No.</b> PCT/SE99/00821	<b>Applicant's or agent's file reference</b>
<b>International filing date (day/month/year)</b> 12 May 1999 (12.05.99)	<b>Priority date (day/month/year)</b> 15 May 1998 (15.05.98)
<b>Applicant</b> ANDERSSON, Lars	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:10 December 1999 (10.12.99)☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

<b>The International Bureau of WIPO</b> 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No.: (41-22) 740.14.35	<b>Authorized officer</b>  C. Cupello  Telephone No.: (41-22) 338.83.38
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## PATENT COOPERATION TREATY

PCT

REC'D 13 SEP 2000

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT PCT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P 04762PC00	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/SE99/00821	International filing date (day/month/year) 12.05.1999	Priority date (day/month/year) 15.05.1998
International Patent Classification (IPC) or national classification and IPC G06F 3/147		
Applicant PRICER AB et al		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

☐ This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand  10.12.1999	Date of completion of this report  08.08.2000
Name and mailing address of the IPEA/SE Patent- och registreringsverket Box 5055 S-102 42 STOCKHOLM Facsimile No. 08-667 72 88	Authorized officer  Göran Magnusson /itw Telephone No. 08-782 25 00

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/se99/00821

## I. Basis of the report

1. This report has been drawn on the basis of *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments.)*:

☒ the international application as originally filed.

☐ the description, pages \_\_\_\_\_, as originally filed,  
 pages \_\_\_\_\_, filed with the demand,  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_,  
 pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☐ the claims, Nos. \_\_\_\_\_, as originally filed,  
 Nos. \_\_\_\_\_, as amended under Article 19,  
 Nos. \_\_\_\_\_, filed with the demand,  
 Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_,  
 Nos. \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

☐ the drawings, sheets/fig \_\_\_\_\_, as originally filed,  
 sheets/fig \_\_\_\_\_, filed with the demand  
 sheets/fig \_\_\_\_\_, filed with the letter of \_\_\_\_\_,  
 sheets/fig \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

2. The amendments have resulted in the cancellation of:

☐ the description, pages \_\_\_\_\_

☐ the claims, Nos. \_\_\_\_\_

☐ the drawings, sheets/fig \_\_\_\_\_

3. ☒ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the supplemental Box (Rule 70.2(c)).

4. Additional observations, if necessary:

SEE SUPPLEMENTAL BOX

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/se99/00821

## V. Resoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	<u>1-6</u>	YES
	Claims	_____	NO
Inventive step (IS)	Claims	<u>1-6</u>	YES
	Claims	_____	NO
Industrial applicability (IA)	Claims	<u>1-6</u>	YES
	Claims	_____	NO

### 2. Citations and explanations

The claimed invention relates to a method and a device for reducing the power consumption of an electronic label. According to the invention the label comprises control means for supplying a transmitter capacitor with power from a charge pump after a signal intended for said label has been received.

The following documents were cited in the Search Report:

D1 : US 5689239 A

D2 : US 5723854 A

D3 : US 5544041 A

The International Preliminary Examination Report is established on the original claims.

D1 discloses an electronic label comprising means for extracting power from an interrogation field and charge pump means for derivation of a higher programming voltage.

D2 discloses an electronic label comprising a voltage-increasing booster for power supply to a memory device.

D3 discloses a system for reducing the power consumption of a price display terminal comprising switching the terminal from a standby mode into an enable mode by means of a transmitted start signal.

However, the solution according to the claimed invention, especially the selective connection of a charge pump means to a transmitter capacitor by means of a received signal, is not known from the cited documents D1-D3 and is not considered to be obvious to a person skilled in the art.

... / ...

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/se99/00821

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: v

Therefore, the invention claimed in claims 1-6 is considered to be novel (N), to involve an inventive step (IS) and also to have industrial applicability (IA).

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

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**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of: **I**

Amended claims were filed 10-12-1999. The amendments must be regarded to go beyond the disclosure in the application as filed (Article 34(2)(b)).

In the description it is stated that the charge pump means is connected to the transmitter capacitor after a signal intended for said label has been received, possibly after control logic means in the control means has decided if a reply is needed or not. This neither states or implies that "control means determining when it is likely that the label will need to transmit" as said in the amended independent claims 1 and 3.

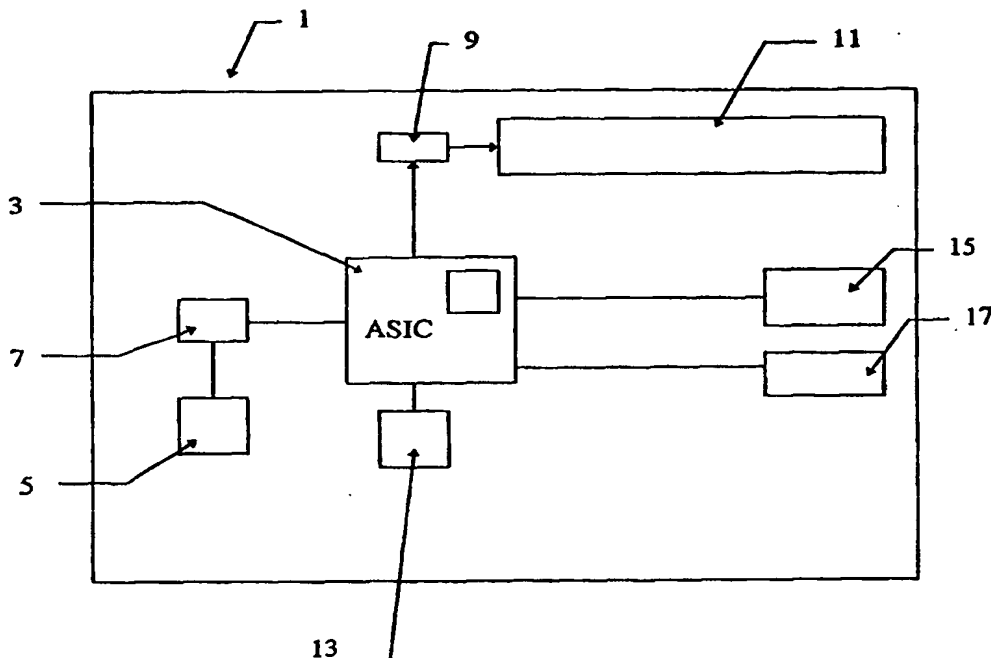
Therefore, the international preliminary examination report is established on the original claims as if the amendments had not been made.



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification <sup>6</sup> : <b>G06F 3/147</b>	<b>A1</b>	(11) International Publication Number: <b>WO 99/60473</b> (43) International Publication Date: 25 November 1999 (25.11.99)
<p>(21) International Application Number: PCT/SE99/00821</p> <p>(22) International Filing Date: 12 May 1999 (12.05.99)</p> <p>(30) Priority Data: <input checked="" type="checkbox"/> 9801719-7 15 May 1998 (15.05.98) SE</p> <p>(71) Applicant (for all designated States except US): PRICER AB [SE/SE]; Kristallen, S-754 51 Uppsala (SE).</p> <p>(72) Inventor; and</p> <p>(75) Inventor/Applicant (for US only): ANDERSSON, Lars [SE/SE]; Blomgatan 10A, S-752 31 Uppsala (SE).</p> <p>(74) Agent: LUDWIG BRANN PATENTBYRÅ AB; P.O. Box 1344, S-751 43 Uppsala (SE).</p>		<p>(81) Designated States: AE, AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b> With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</p>

(54) Title: REMOTELY CONTROLLED POWER SUPPLY IN AN ELECTRONIC LABEL



## (57) Abstract

The present invention relates to a method and device for reducing the power consumption of an electronic label (1). The label (1) comprises control means (3) for supplying a transmitter (17) with power from a charge pump (23) after a signal intended for said label (1) has been received by label receiver means (15).

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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/SE 99/00821

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
<b>IPC6: G06F 3/147</b> According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols)		
<b>IPC6: G06F</b>		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
<b>SE,DK,FI,NO classes as above</b>		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
<b>WPI</b>		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<b>US 5689239 A (LEIGH HOLBROOK TURNER ET AL),</b> 18 November 1997 (18.11.97), column 4, line 64 - column 5, line 4; column 11, line 47 - line 67; column 13, line 14 - line 61 --	1-6
A	<b>US 5723854 A (JEAN CLAUDE BERNEY),</b> 3 March 1998 (03.03.98), column 3, line 40 - line 45, abstract --	1-6
A	<b>US 5544041 A (YOSHIHIKO NEKOMOTO),</b> 6 August 1996 (06.08.96), column 2, line 46 - line 56 -- -----	1-6
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "I" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "I" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search		Date of mailing of the international search report
18 October 1999		20 -10- 1999
Name and mailing address of the ISA/ Swedish Patent Office Box 5055, S-102 42 STOCKHOLM Facsimile No. +46 8 666 02 86		Authorized officer Göran Magnusson/MN Telephone No. +46 8 782 25 00

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/SE 99/00821

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5689239 A	18/11/97	AT 180084 T AU 674498 B DE 69229176 D EP 0603279 A,B WO 9305489 A	15/05/99 02/01/97 00/00/00 29/06/94 18/03/93
US 5723854 A	03/03/98	CA 2170861 A CN 1130437 A CZ 9600644 A EP 0715760 A HU 74626 A HU 9600496 D JP 9502559 T PL 313226 A SK 28996 A WO 9601473 A	18/01/96 04/09/96 11/09/96 12/06/96 28/01/97 00/00/00 11/03/97 10/06/96 03/06/98 18/01/96
US 5544041 A	06/08/96	JP 5314029 A	26/11/93